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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,951	05/30/2006	Ulf Bodin	NET-6500	8919
25962	7590	02/06/2009		
SLATER & MATSIL, L.L.P. 17950 PRESTON RD, SUITE 1000 DALLAS, TX 75252-5793			EXAMINER BROCKMAN, ANGEL T	
			ART UNIT	PAPER NUMBER
			2416	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/580,951

Applicant(s)

BODIN ET AL.

Examiner

ANGEL BROCKMAN

Art Unit

2416

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 17 and 18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are currently directed to ‘functional descriptive material’ that has not been claimed in a manner that imparts functionality when employed as a computer component, such that the claims are currently directed to an abstract ideal. See MPEP section 2106.01. Computer programs are required to be claimed using the following format ‘a computer-readable medium encoded with computer instructions which when executed cause the computer to perform a method, the method comprising the steps of.’ Computer usable medium also includes a data signal per se (see page 23, lines 16-17).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the

Art Unit: 2416

reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Dziong et al.(US 6,791,941 B1, hereinafter Dziong).

Regarding **claim 1**, Dziong discloses measuring end-to-end delay located outside the network core and detecting forward quality violations in at least one path between these nodes (column 8, lines 50-67, column 9, lines 1-45, figure 9) selecting at least one potentially overloaded interface comprised in the at least one path where quality violations were detected by combining knowledge about different end-to-end measurements in the network (column 7, lines 50-66, where the CAC model makes measurements, column 9), with knowledge about the topology, i.e.. which interfaces are traversed over each individual path, and knowledge about booking levels and forwarding capacity for the interfaces(column 10, lines 5-19); defining a new or adjusting an already existing provisional level for each selected interface, the provisioning level defining a maximum admitted sum of forwarding resources requested directly or indirectly by applications for their application data flows, ADFs, for the interface/s, such that the usage of each path detected to have forwarding quality violations is limited to at one or more interfaces (column 4, lines 14-24, column 7, lines 25-40, figure 9).

Regarding **claim 2**, Dziong discloses iterating the process to improve the settings of the provisioning levels in the system(figure 9, block 970, which repeats the process)

Art Unit: 2416

Regarding **claim 3**, Dziong discloses storing information about previous end-to-end measurements and previous booking levels for the interfaces(column 10, lines 10-15, figure 9, block 900 where the previous end-to-end measurements and booking levels of the interfaces are included in the history).

Regarding **claim 4**, Dziong discloses using history of previous booking levels possibly together with any associated quality violations, forwarding capacities and/or provisioning levels for the interfaces for the selection of at least one potentially overloaded interface (column 10, lines 20-60).

Regarding **claim 5**, Dziong discloses detecting that a previously set provisioning level for an interface is reached without any measured quality violation on paths involving this interface (figure 9) and by using the stored information of previous booking levels selecting at least one other interface that probably caused the quality violation measured when the previously set provisioning level was set and remove or increase the provisioning level for the previously selected interface and instead provide a provisioning level to each new selected interface or if no other potentially overloaded exist, increasing the provisioning level(column 10, lines 30-60).

Regarding **claim 6**, Dziong discloses setting the provisioning level equal to the booking-level for the interface at the time for the detected quality violation(figure 9, column 10, lines 5-50, where the overbooking factor is the provisioning level). The provisioning level up and down are adjusted to keep the system equal to the booking level so that overbooking does not occur using the optimal values that are estimated from long term statistics of the system(column 7, lines 38-41).

Art Unit: 2416

Regarding **claim 7**, Dziong discloses the defining of a new or the adjusting of an already existing provisioning level for the at least one selected interface is performed by setting the provisioning level lower than the booking-level for the interface at the time for the detected quality violation (column 7, lines 21-41, where the violation degree is VQos which its the provisioning level) and either pre-empting some reservations to reach the provisioning level or waiting for some reservations to be released to reach the provisioning level (column 8, lines 20-3, figure 8, column 7, lines 55-67, where the CAC model provides distributing which includes a queue for waiting for bandwidth to be released).

Regarding **claim 8**, Dziong discloses choosing one of the described provisioning level setting methods depending on which level of quality violation that was measured(column 8, lines 20-40, column 9,lines 37-65).

Regarding **claim 9**, the phrase "adapted to" is not positively recited. Dziong discloses measuring end-to-end delay located outside the network core and detecting forward quality violations in at least one path between these nodes (column 8, lines 50-67, column 9, lines 1-45, figure 9) selecting at least one potentially overloaded interface comprised in the at least one path where quality violations were detected by combining knowledge about different end-to-end measurements in the network (column 7, lines 50-66, where the CAC model makes measurements, column 9), with knowledge about the topology, i.e.. which interfaces are traversed over each individual path, and knowledge about booking levels and forwarding capacity for the interfaces(column 10, lines 5-19); defining a new or adjusting an already existing provisional level for each selected interface, the provisioning level defining a maximum admitted sum of forwarding resources requested directly or indirectly by applications for their

Art Unit: 2416

application data flows, ADFs, for the interface/s, such that the usage of each path detected to have forwarding quality violations is limited to at one or more interfaces (column 4, lines 14-24, column 7, lines 25-40, figure 9).

Regarding **claim 10**, the phrase "adapted to" is not positively recited. Dziong discloses iterating the process to improve the settings of the provisioning levels in the system (figure 9, block 970, which repeats the process)

Regarding **claim 11**, the phrase "adapted to" is not positively recited. Dziong discloses storing information about previous end-to-end measurements and previous booking levels for the interfaces (column 10, lines 10-15, figure 9, block 900 where the previous end-to-end measurements and booking levels of the interfaces are included in the history).

Regarding **claim 12**, the phrase "adapted to" is not positively recited Dziong discloses using history of previous booking levels possibly together with any associated quality violations, forwarding capacities and/or provisioning levels for the interfaces for the selection of at least one potentially overloaded interface (column 10, lines 20-60).

Regarding **claim 13**, the phrase "adapted to" is not positively recited. Dziong discloses detecting that a previously set provisioning level for an interface is reached without any measured quality violation on paths involving this interface (figure 9) and by using the stored information of previous booking levels selecting at least one other interface that probably caused the quality violation measured when the previously set provisioning level was set and remove or increase the provisioning level for the previously selected interface and instead provide a

Art Unit: 2416

provisioning level to each new selected interface or if no other potentially overloaded exist, increasing the provisioning level(column 10, lines 30-60).

Regarding **claim 14**, Dziong discloses setting the provisioning level equal to the booking-level for the interface at the time for the detected quality violation (figure 9, column 10, lines 5-50, where the overbooking factor is the provisioning level). The provisioning level up and down are adjusted to keep the system equal to the booking level so that overbooking does not occur using the optimal values that are estimated from long term statistics of the system(column 7, lines 38-41).

Regarding **claim 15** Dziong discloses the defining of a new or the adjusting of an already existing provisioning level for the at least one selected interface is performed by setting the provisioning level lower than the booking-level for the interface at the time for the detected quality violation (column 7, lines 21-41, where the violation degree is VQos which its the provisioning level) and either pre-empting some reservations to reach the provisioning level or waiting for some reservations to be released to reach the provisioning level (column 8, lines 20-3, figure 8, column 7, lines 55-67, where the CAC model provides distributing which includes a queue for waiting for bandwidth to be released).

Regarding **claim 16**, Dziong discloses adjusting means to choose one of the described provisioning setting level methods depending on which level of quality violation was measured (column 8, lines 35-50, figure 9).

Regarding **claims 17-18**, Dziong discloses computer software in a processing means for performing steps (column 3, lines 47-64).

Art Unit: 2416

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bearden et al.(US 2003/0086425 A1),. Hluchyh et al.(US 5,488,609) and Liao et al.(US 2004/013679 A1).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANGEL BROCKMAN whose telephone number is (571)270-5664. The examiner can normally be reached on Monday-Friday ,7:30-5:00pm.

6. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derrick Ferris can be reached on 571-272-3123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ANGEL BROCKMAN
Examiner
Art Unit 2416

/A. B./

Application/Control Number: 10/580,951

Page 9

Art Unit: 2416

Examiner, Art Unit 2416

/Derrick W Ferris/

Supervisory Patent Examiner, Art Unit 2416